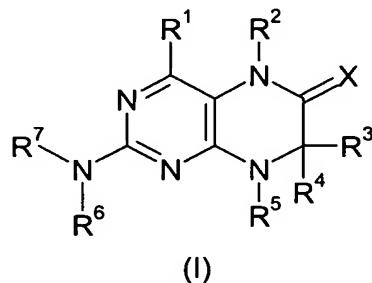


Patent Claims

5 1) A method of treating a disease or condition chosen from cancer, infections, inflammatory and autoimmune diseases said method comprising administering to a patient in need thereof a therapeutically effective amount of a compound of the formula (I),

10



wherein

15 R^1 denotes a group selected from among hydrogen, NH_2 , XH , halogen and a C_1 - C_3 -alkyl group optionally substituted by one or more halogen atoms,

R^2 denotes a group selected from among hydrogen, CHO , XH , $-X-C_1-C_2$ -alkyl and an optionally substituted C_1 - C_3 -alkyl group,

20 R^3 , R^4 are identical or different and denote a group selected from among optionally substituted C_1 - C_{10} -alkyl, C_2 - C_{10} -alkenyl, C_2 - C_{10} -alkynyl, aryl, heteroaryl, C_3 - C_8 -cycloalkyl, C_3 - C_8 -heterocycloalkyl, $-X$ -aryl, $-X$ -heteroaryl, $-X$ -cycloalkyl, $-X$ -heterocycloalkyl, $-NR^8$ -aryl, $-NR^8$ -heteroaryl, $-NR^8$ -cycloalkyl, - and $-NR^8$ -heterocycloalkyl, or

25 a group selected from among hydrogen, halogen, $COXR^8$, $CON(R^8)_2$, COR^8 and XR^8 , or

R^3 and R^4 together denote a 2- to 5-membered alkyl bridge which may contain 1 to 2 heteroatoms,

R^5 denotes hydrogen or a group selected from among optionally substituted C_1 - C_{10} -alkyl, C_2 - C_{10} -alkenyl, C_2 - C_{10} -alkynyl, aryl, heteroaryl and $-C_3$ - C_6 -cycloalkyl, or R^3 and R^5 or R^4 and R^5 together denote a saturated or unsaturated C_3 - C_4 -alkyl bridge 5 which may contain 1 to 2 heteroatoms,

R^6 denotes optionally substituted aryl or heteroaryl,

R^7 denotes hydrogen or $-CO-X-C_1-C_4$ -alkyl, and

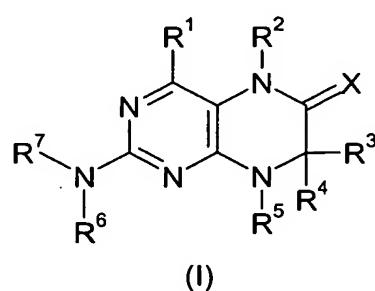
10 X in each case independently of one another denotes O or S,

and

R^8 in each case independently of one another denotes hydrogen or a group selected from among optionally substituted C_1 - C_4 -alkyl, C_2 - C_4 -alkenyl, C_2 - C_4 -alkynyl 15 and phenyl,

or the tautomers, the racemates, the enantiomers, the diastereomers and the mixtures thereof, and optionally the pharmacologically acceptable acid addition salts thereof.

20 2) A method of treating a disease or condition chosen from HIV, Kaposi's sarcoma, colitis, arthritis, Alzheimer's disease, glomerulonephritis, conditions related to wound healing, bacterial, fungal and/or parasitic infections, leukaemias, lymphoma, solid tumours, psoriasis, bone diseases and cardiovascular disease comprising 25 administering to a patient in need thereof a therapeutically effective amount of a compound of formula (I)



wherein

R¹ denotes a group selected from among hydrogen, NH₂, XH, halogen and a C₁-C₃-alkyl group optionally substituted by one or more halogen atoms,

5

R² denotes a group selected from among hydrogen, CHO, XH, -X-C₁-C₂-alkyl and an optionally substituted C₁-C₃-alkyl group,

R³, R⁴ are identical or different and denote a group selected from among optionally substituted C₁-C₁₀-alkyl, C₂-C₁₀-alkenyl, C₂-C₁₀-alkynyl, aryl, heteroaryl, C₃-C₈-cycloalkyl, C₃-C₈-heterocycloalkyl, -X-aryl, -X-heteroaryl, -X-cycloalkyl, -X-heterocycloalkyl, -NR⁸-aryl, -NR⁸-heteroaryl, -NR⁸-cycloalkyl, - and -NR⁸-heterocycloalkyl, or
10 a group selected from among hydrogen, halogen, COXR⁸, CON(R⁸)₂, COR⁸ and XR⁸,
15 or
R³ and R⁴ together denote a 2- to 5-membered alkyl bridge which may contain 1 to 2 heteroatoms,

R⁵ denotes hydrogen or a group selected from among optionally substituted C₁-C₁₀-alkyl, C₂-C₁₀-alkenyl, C₂-C₁₀-alkynyl, aryl, heteroaryl and -C₃-C₆-cycloalkyl, or
20 R³ and R⁵ or R⁴ and R⁵ together denote a saturated or unsaturated C₃-C₄-alkyl bridge which may contain 1 to 2 heteroatoms,

R⁶ denotes optionally substituted aryl or heteroaryl,

25

R⁷ denotes hydrogen or -CO-X-C₁-C₄-alkyl, and

X in each case independently of one another denotes O or S,

and

30 R⁸ in each case independently of one another denotes hydrogen or a group selected from among optionally substituted C₁-C₄-alkyl, C₂-C₄-alkenyl, C₂-C₄-alkynyl and phenyl,

or the tautomers, the racemates, the enantiomers, the diastereomers and the mixtures thereof, and optionally the pharmacologically acceptable acid addition salts thereof.

5

3) The methods according to claims 1 or 2 wherein for the formula (I)

R¹ denotes hydrogen,

10 R² denotes a group selected from among a CHO, OH, and CH₃ group,

R³, R⁴ are identical or different and denote a group selected from among hydrogen, optionally substituted C₁-C₆-alkyl, C₂-C₆-alkenyl, C₂-C₆-alkynyl, C₃-C₇-cycloalkyl, or R³ and R⁴ together denote a C₂-C₅-alkyl bridge,

15

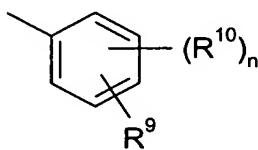
R⁵ denotes a group selected from among optionally substituted C₁-C₁₀-alkyl, C₂-C₁₀-alkenyl, C₂-C₁₀-alkynyl, C₃-C₆-cycloalkyl and C₃-C₆-cycloalkenyl, or R³ and R⁵ or R⁴ and R⁵ together denote a saturated or unsaturated C₃-C₄-alkyl bridge which may contain 1 to 2 heteroatoms, and

20

R⁷ denotes hydrogen.

4) The methods according to claim 3, wherein for the formula (I)

25 R⁶ denotes a group of general formula



wherein

n denotes 1, 2, 3 or 4,

R^9 denotes a group selected from among optionally substituted C_1 - C_6 -alkyl, C_2 - C_6 -alkenyl, C_2 - C_6 -alkynyl, $-CONH-C_1-C_{10}$ -alkylene, $-O$ -aryl, $-O$ -heteroaryl, $-O$ -cycloalkyl, $-O$ -heterocycloalkyl, aryl, heteroaryl, cycloalkyl and heterocycloalkyl or

a group selected from among $-O-C_1-C_6$ -alkyl- Q^1 , $-CONR^8-C_1-C_{10}$ -alkyl- Q^1 ,

5 $-CONR^8-C_2-C_{10}$ -alkenyl- Q^1 , $-CONR^8-Q^2$, halogen, OH, $-SO_2R^8$, $-SO_2N(R^8)_2$, $-COR^8$, $-COOR^8$, $-N(R^8)_2$, $-NHCOR^8$, $CONR^8OC_1-C_{10}$ alkyl- Q^1 and $CONR^8OQ^2$,

Q^1 denotes hydrogen, $-NHCOR^8$, or a group selected from among an optionally substituted $-NH$ -aryl, $-NH$ -heteroaryl, aryl, heteroaryl, C_3 - C_8 -cycloalkyl- and

10 heterocycloalkyl group,

Q^2 denotes hydrogen or a group selected from among an optionally substituted aryl, heteroaryl, C_3 - C_8 -heterocycloalkyl, C_3 - C_8 -cycloalkyl- and C_1 - C_4 -alkyl- C_3 - C_8 -cycloalkyl group,

15

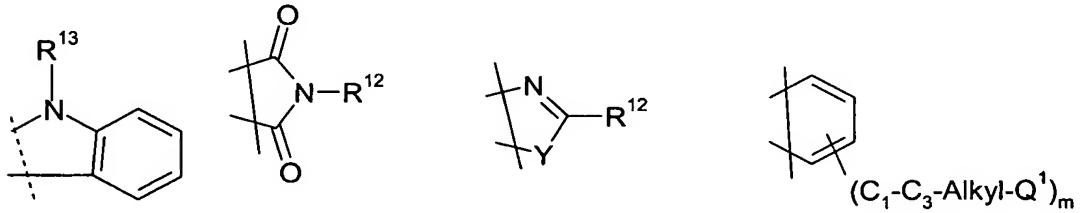
R^{10} is identical or different and denotes a group selected from among optionally substituted C_1 - C_6 -alkyl, C_2 - C_6 -alkenyl and C_2 - C_6 -alkynyl, $-O-C_1-C_6$ -alkyl,

$-O-C_2-C_6$ -alkenyl, $-O-C_2-C_6$ -alkynyl, C_3-C_6 -heterocycloalkyl and C_3-C_6 -cycloalkyl, or a group selected from among hydrogen, $-CONH_2$, $-COOR^8$, $-OCON(R^8)_2$, $-N(R^8)_2$, $-$

20 $NHCOR^8$, $-NHCON(R^8)_2$, $-NO_2$ and halogen,

or

adjacent groups R^9 and R^{10} together denote a bridge of the formula



Y denotes O, S or NR^{11} ,

25 m denotes 0, 1 or 2

R^{11} denotes hydrogen or C_1 - C_2 -alkyl, and

R^{12} denotes hydrogen or a group selected from among optionally substituted phenyl, pyridyl, pyrazinyl, pyrimidinyl, pyridazinyl, $-C_1-C_3$ -alkyl-phenyl, $-C_1-C_3$ -alkyl-pyridyl, $-C_1-C_3$ -alkyl-pyrazinyl, $-C_1-C_3$ -alkyl-pyrimidinyl and $-C_1-C_3$ -alkyl-pyridazinyl,
and
5 R^{13} denotes C_1-C_6 -alkyl.

5) The methods according to claim 4, wherein for the formula (I)

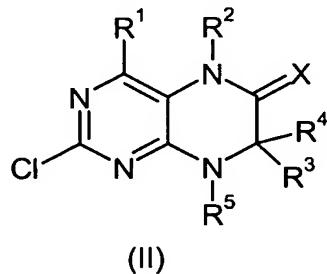
R^1 denotes hydrogen,

10 R^2 denotes CH_3 , and

R^7 denotes hydrogen.

6) A method of treating a disease or condition chosen from cancer, infections,

15 inflammatory and autoimmune diseases said method comprising administering to a patient in need thereof a therapeutically effective amount of a compound of the formula (II),

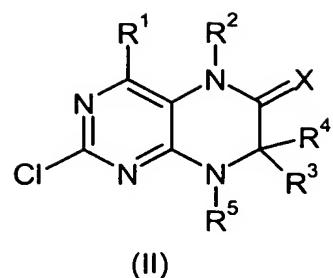


wherein

20 R^1-R^5 and X have the meanings given in claim 1.

7) A method of treating a disease or condition chosen from HIV, Kaposi's sarcoma, colitis, arthritis, Alzheimer's disease, glomerulonephritis, conditions related to wound healing, bacterial, fungal and/or parasitic infections, leukaemias, lymphoma, solid

25 tumours, psoriasis, bone diseases and cardiovascular disease comprising administering to a patient in need thereof a therapeutically effective amount of a compound of the formula (II),



wherein

R^1 - R^5 and X have the meanings given in claim 1.